COPY OF PAPER ORIGINALLY FILED

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE
APPLICATION OF: Akihiro Shimotsu

SERIAL NO.: 09/771,273

FILED: January 26, 2001

FOR: FERRULE FOR AN OPTICAL FIBER AND MANUFACTURING METHOD THEREOF

EXAMINER: J. Doan

ART UNIT: 2874

ATTORNEY DOCKET NO.: A0-234 US

I hereby certify that this document along with any documents referred to as being attached, is being deposited with the United States Postal Service on the date shown below as first class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner of Patents, Washington, D.C. 20231.

Response 8/ C. Stanley

January 30, 2002 3-6-02
Date

Kerri Richardson
Kerri Richardson

Assistant Commissioner of Patents
Washington, D.C. 20231

Dear Sir:

RESPONSE

In response to the Office Action of December 17, 2001, Applicant has the following comments:

REMARKS

Reconsideration and allowance of the application are respectfully requested.

In the Office Action of December 17, 2001, claims 1-9 were pending in the application and were rejected under either 35 U.S.C. §102(e) or §103(a) as being anticipated by or unpatentable over Yamane et al 6,126,325. Those rejections are respectfully but emphatically traversed.

The rejection of all of the claims in view of Yamane reference is not at all understood. It would appear that the Examiner either does not understand the invention of the instant application or the Examiner is misinterpreting the Yamane reference or both.

Specifically, the disclosed and claimed invention herein is directed to a simple but effective ferrule which has a capillary for receiving an optical fiber strand therein, along with a flange which is molded onto the capillary outer surface. The flange may be molded of plastic material. This unique structure is shown in Figures 1 and 2 of the instant application. However,

the Examiner's attention is drawn to Figures 3 and 4 wherein the invention clearly can be understood. A mold 20 is used to receive capillary 10 (12). A plastic material 29 (Fig. 4) is injected into mold 20 to form flange 14 (Figs. 1 and 2) which is, thereby, permanently molded about the capillary. Projection 16 is molded into recess 15 to further lock the flange to the capillary. This specifically disclosed and claimed invention is not shown in nor remotely suggested by Yamane 6,126,325 under either 35 U.S.C. §102 or §103.

The teachings of Yamane are completely different from Applicant's disclosed and claimed invention, above. Yamane shows a ferrule 73 within a ferrule holder 72. However, as specifically stated in column 5, line 16, of Yamane, ferrule holder 72 is formed of a metal. In other words, it is a pre-formed component. It specifically states in column 5, line 48 of Yamane that: "It should be noted that ferrule 72 is press-fitted into the ferrule holder 72 . . ." (emphasis added). Simply put, Applicant's disclosed and claimed invention calls for a flange (ferrule holder) to be overmolded about a capillary (ferrule), whereas Yamane specifically teaches a pre-formed metal ferrule holder press-fit onto a ferrule. How in the world can the Examiner even suggest that these teachings are the same under 35 U.S.C. §102 or suggestive under 35 U.S.C. §103?

Regarding claim 2, the Examiner states that the use of plastic versus metal is an obvious design choice. This position is not well taken. How does the Examiner propose to readily mold a metal flange about a ferrule? Most importantly, Yamane specifically teaches a press-fitting concept and not an overmolding concept wherein plastic can be easily used.

Still further, the Examiner states that Yamane discloses, in Fig. 6, "a recess portion (72d,72e) and a projecting portion (72b1, 72b2 and 72b3), wherein the recess portion is formed in the capillary outer surface and the projecting portion is formed integral with the flange as shown in Fig. 6." This statement is not true and, in fact, does not make sense. First of all, if the Examiner would please note the numbers 72d, 72e, 72b1, 72b2 and 72b3, the Examiner will see that the prefix number "72" means that all of these items are on the same component, namely sleeve 72. This is quite obvious in the drawings and, of course, is explained in the Yamane specification. In other words, the recess portion is not formed in the capillary outer surface and the projecting portion on a different component as erroneously stated by the Examiner. The claims herein call for the recess portion and the projecting portion to be formed at an interface between the capillary outer surface and the flange. This is not true with Yamane. Other of the claims call for the recess portion to be formed on one of the capillary or the flange and the

projecting portion to be formed on the other of the capillary or flange. Again, this is not true in Yamane. The Examiner's misstatements concerning the clear teachings of Yamane are not understood and certainly are not well taken.

In view of the foregoing, reconsideration of application, allowance of claims 1-9 and passing the application to issue are respectfully requested.

Respectfully submitted,

MOLEX INCORPORATED

Date: Jan. 28, 2002

By: _____
A. A. Tirva
Registration No. 27,237
Attorney of Record

Mailing Address:
A.A. Tirva
MOLEX INCORPORATED
2222 Wellington Court
Lisle, IL 60632-1682
Tel.: (630) 527-4390
Fax.: (630) 416-4962